



# Preserve the Health Protection Provided by the CARB Off-Road Diesel Regulation

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Requests from Health, Science  
and Environmental Groups



# General Concern Over Rollbacks

- Many Health, Science and Environmental Groups opposed the changes and rollbacks to the Off-Road regulation through the budget process, as the critical health protections and air quality benefits of the rule were significantly eroded.
- The changes undermine some emission reductions from this rule, putting our state SIP at risk.
- The Off-Road rule was adopted after a 2 year public process with significant stakeholder outreach; large policy changes to such a complex rule do not belong as part of the mainly closed-door budget process.
- However, these changes are now the law. We want to work with stakeholders to make up the lost health protections and emission reductions.

# California Needs Health Protections from Deadly Diesel Exhaust

- California has 5 of the 10 smoggiest cities in the U.S. - residents are paying the price with their health.
- Diesel pollution contains fine PM and smog-forming NOx; numerous studies have documented a range of adverse health impacts:
  - increased risk for respiratory and cardiovascular illnesses, including asthma and heart attacks;
  - stunted lung growth in children,
  - adverse birth outcomes,
  - more frequent emergency room visits,
  - increased cancer risk and
  - higher mortality rates.
- The Off-Road Rule, as adopted by CARB in July 2007 would prevent 4,000 premature deaths and thousands of illnesses, saving Californians \$26 billion in health costs.



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And Dozens More.

# Recent Legislative Changes to the Off-Road Rule

- Proposed Changes:
  - Credits for reduced fleet size
  - Credits for reduced fleet HP/ Early retirements
  - Delayed compliance for large fleets in 2011 & 2012.
- Who Benefits? Large Fleets Appear to Benefit most from these changes
- Significant loss of health benefits & emission reductions
  - 260 Fewer Premature Deaths Prevented
  - 17% Loss of Reductions Needed to Comply with Federal Air Quality Standards (through the SIP) → Financial Penalties; risk losing federal transportation \$ for construction.

# Add 3 Safeguards to New Provisions

- Focus new provisions on companies disproportionately impacted
  - Avoid over-awarding activity credit if activity increases
  - Avoid over-awarding retirement credit for fleets if they increase in size
  - Set up minimum annual retrofit and turnover requirements, independent of new credits



# Increased Activity: Revoking Credits

- If credit is awarded for reduced activity, and activity resumes, credits are adjusted to reflect actual vehicle use.

## Example

- 10,000 HP fleet reduces activity by 20%, receives 2,000 HP credit to PM and NOx
- Activity goes back up 10% → fleet loses 1,000 HP credit

**Would only apply to firms who have resumed activity.**

## **Increased Fleet Size: Revoking Credits**

- If credit is awarded for vehicle retirement, and the fleet size later increases, credits are adjusted to reflect vehicles added
  - 10,000 HP fleet retires 2,000 HP → receives 2,000 HP credit to PM and NOx
  - Fleet adds 1,000 HP
    - The fleet loses 1,000 HP credit, and/or
    - The fleet must add the cleanest engines possible

**Would only apply to fleets which increase their total horsepower.**



# Equity & Accountability

- Not proposing any loss of credit to those fleets that continue to be affected by the recession
- Need to prevent emissions increase if federal stimulus or other funding causes a spike in construction activity and diesel emissions
- Recommendations maintain the spirit of the legislative amendments while preventing misuse of credits by fleets that are prospering.

# Require Minimum Annual Retrofitting

- For fleets using reduced activity credit, new early retirement credit, or delayed compliance in 2011 & 2012
- Example: 10% minimum annual retrofit requirement
- Pros
  - Would provide health benefits in the near-term, when communities need them most, as well as health protections for equipment operators.
  - Allows fleets to learn how to install and maintain retrofits with a small number of retrofits before more are required
  - Only requires half as much as adopted regulation, but will broaden the retrofit market

# Require Minimum Annual Turnover

- Even for fleets that utilize the new additional credit for reduced activity and retirement
- Example: 4% minimum annual turnover requirement; perhaps more if the economy rebounds quickly.
- Could make up some of SIP shortfall in 2014



# Diesel Clean Up Creates Green Jobs

- Diesel Clean-up Measures stimulate CA economy by creating green tech jobs in manufacturing, sales, installation of control technologies, and maintenance of controls (in addition to reduced health costs).
- Example: Emission controls, a multi-billion dollar industry, employing 65,000.
  - This industry may face layoffs as un-sold controls pile up at warehouses.
- In CA, 100,000 retrofits could create 14,000 to 33,000 jobs.

# Unprecedented Amount of Funding Available for Diesel Clean Up

- \$300 million through Diesel Emissions Reduction Program under the American Recovery and Reinvestment Act of 2009.
  - Funds will flow quickly
  - Off-road equipment will be covered
- Nearly \$500 million in other funds are available for diesel clean up each year in CA (Moyer, AB 118, SEPs, air district programs)

# How Can We Make Up the Lost Health Protections?

- Some construction companies have been hit hard by the recession; the purpose of the legislative changes are to ease that burden, but not at the expense of necessary pollution reductions & health protections, some of which may now be lost from the original rule.
- We must preserve all of the health protections and emission reductions in the original rule and in the SIP.
- Can the Off-road sector make up the emission reductions lost through these legislative changes?
  - Clean Equipment requirements for stimulus and state bond funded projects
  - Clean Equipment requirements near sensitive sites
- Note: Failure to comply with federal Air Quality rules in 2014 could trigger sanctions that would block federal transportation \$, which hurts the construction industry.